

REMARKS

In the Office Action, the Examiner rejected claims 1 and 8-9, objected to claims 2-7, and allowed claims 10-17. Applicant thanks the Examiner for allowing claims 10-17 and for indicating that claims 2-17 would be allowable if re-written in independent form. By this Response, Applicant amends claims 1, 7 and 10-14, cancels claims 13 and 15, and adds new claims 18-22. Currently, claims 1-12, 14 and 16-22 remain pending in the present application and are believed to be in condition for allowance. In view of the foregoing amendments and following remarks, Applicant respectfully requests allowance of all pending claims.

In this Response, Applicant amends claims that the Examiner identified as reciting allowable subject matter. These amendments are intended to clarify various claim terms without broadening scope. Accordingly, Applicant respectfully asserts that these claims are still allowable.

Rejection Under 35 U.S.C. § 102

In the Office Action, the Examiner rejected claims 1 and 8-9 as anticipated by Fig. 2B of the present application. Specifically, the Examiner stated:

Claim 1, 8 and 9 are rejected under 35 U.S.C. 102(a) as being anticipated by the admitted prior art.

As stated in the admitted prior art of Fig. 2B a switching engine **210** identifies and routes transactions to a PCI-to-PCI Bridge 170 (bridge) or PCI Devices **160, 180** (nonbridge) via PCI-to-PCI Bridge Secondary Ports **230b**

(first secondary port) and Secondary Ports **220b, 240b**
(plurality of end device ports).

With respect to claim 8, peer-to-peer transactions are inherent in the PCI Local Bus Specification, Revision 2.2 that is incorporated by reference in the admitted prior art.

With respect to claim 9, transactions can be routed from CPU **100** to PCI Devices **160, 180** or [to] PCI-to-PCI Bridge **170** which is considered a downstream direction.

Office Action, p. 2.

Legal Precedent

Applicant respectfully traverses this rejection. Anticipation under Section 102 can be found only if a single reference shows exactly what is claimed. *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 U.S.P.Q. 773 (Fed. Cir. 1985). For a prior art reference to anticipate under Section 102, every element of the claimed invention must be identically shown in a single reference. *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). To maintain a proper rejection under Section 102, a single reference must teach each and every element or step of the rejected claim. *Atlas Powder v. E.I. du Pont*, 750 F.2d 1569 (Fed. Cir. 1984). Thus, if the claims recite even one element not found in the cited reference, the reference does not anticipate the claimed invention.

The system of Fig. 2B does not anticipate claims 1, 8 and 9 for a number of reasons. For instance, the cited reference does not teach or suggest “identifying a transaction from a primary port as a bridge transaction or a non-bridge transaction,” as

recited by independent claim 1. (Emphasis added.) In contrast, Fig. 2B depicts a switch 200b that does not route non-bridge transactions. As is explained below, the switch 200b only routes bridge transactions. The switch 200b receives downstream transactions through a primary port 250b and routes the transactions through secondary ports 220b-240b. Significantly, “both the primary port 250b and the secondary ports 220b-240b behave as PCI-to-PCI bridges.” Specification, paragraph 22. That is, all of the ports 220b-240b function as bridges. Thus, none of the ports 220b-250b transmit non-bridge transactions. To address devices downstream from the switch 200b, the CPU 110 “enumerates each of the bridges associated with the ports 220b-250b” *Id.* Consequently, every transaction routed by switch 210b is a bridge transaction. In other words, because all of the ports 220b-250b are addressed as bridges, the switching engine 210b does not identify or route non-bridge transactions. Thus, the system of Fig. 2B does not teach *all* of the features of claim 1. In view of these deficiencies, the cited reference cannot anticipate claim 1 or its dependent claims 8 and 9.

For these reasons among others, Applicant respectfully requests withdrawal of the rejections under 35 U.S.C. § 102.

New Claims 18-22

Applicants respectfully assert that new claims 18-22 are allowable. Claim 18 depends from independent claim 10, which recites “circuitry to route the transaction to at least one of the one or more secondary-end-device ports if the circuitry to decode the

target address decodes the target address as not directed to a bridge.” (Emphasis added.)

As noted above, Fig. 2B does not disclose a switch that routes non-bridge transactions.

Accordingly, the cited art does not anticipate amended claim 10 or its dependent claim 18.

Similarly, new independent claim 19 recites “a routing engine configured to selectively transmit a transaction from the primary port to at least one secondary-port of the plurality of secondary ports based on the absence of a bridge downstream from the at least one secondary-port.” Again, as noted above, all of the ports on the downstream side of the system of Fig. 2B behave as bridges, so none of the transactions passing through the switch 200b of Fig. 2b are routed based on the absence of a bridge. Thus, the cited art does not anticipate claim 19 or the claims that depend therefrom.


For these reasons among others, Applicant respectfully asserts that new claims 18 through 22 are allowable.

Conclusion

In view of the remarks set forth above, Applicant respectfully requests reconsideration of the Examiner's rejections and allowance of all pending claims. If the Examiner believes that a telephonic interview will help speed this application toward issuance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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